Claim 43, page 81, line 29, delete "Y and/or E and/or J" and insert --Y, E and J--.

--9. (Once Amended) A method for controlling a robotic arm structure utilizing electronic computer means, the arm structure having a radial drive shaft and a rotary drive shaft respectively providing R- and θ motion and having an end effector drive shaft providing Y (yaw) motion, each drive shaft being driven by a respective motor, the arm structure having n longitudinally extending links, each link having respective proximal and distal end portions, n being 2 or a larger integer, and an end effector mounted at a distal end portion of an outermost of the links, comprising the steps of:

repeatedly measuring the rotational positions of the radial drive shaft, the rotary drive shaft and the end effector drive shaft;

generating electronic signals representative of the rotational positions;

communicating the electronic signals representative of the rotational positions to the electronic compute means;

utilizing the electronic computer means to compute the locus of the end effector from the electronic signals representative of the rotational positions of the drive shafts, and to control the drive motors to move and position the end effector in any desired location within its reach;

[The method of claim 8] wherein the step of utilizing comprises the substeps of:

continuously generating the desired position, orientation, velocity, acceleration and jerks of the end effector;

continuously measuring the motor positions;

solving a direct kinematic problem at position level by calculating the position and the orientation of the end effector, and an end effector tracking error;